- (5) The name and address of any persons who conducted the cleaning and replacement;
- (6) The dates on which cleaning and replacement were accomplished;
- (7) The dates of sampling and testing;
- (8) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization, preservation, and chain-of-custody of the samples;
- (9) A description of the tests performed, the date the tests were performed, and the results of the tests;
- (10) The name and model numbers of the instrument(s) used in performing the tests:
 - (11) QA/QC documentation; and
- (12) The following statement signed by the generator or his authorized representative:

I certify under penalty of law that all process equipment required to be cleaned or replaced under 40 CFR 261.35 was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment.

[55 FR 50482, Dec. 6, 1990, as amended at 56 FR 30195, July 1, 1991; 70 FR 34561, June 14, 2005]

Subpart E—Exclusions/Exemptions

Source: 71 FR 42948, July 28, 2006, unless otherwise noted.

§ 261.38 Exclusion of comparable fuel, emission-comparable fuel, and syngas fuel.

- (a) Specifications for excluded fuels. Materials that meet the specifications for comparable fuel, emission-comparable fuel, or syngas fuel under paragraphs (a)(1), (a)(2), or (a)(3) of this section, respectively, and the other requirements of this section, are not solid wastes.
- (1) Comparable fuel specifications.—(i) Physical specifications.—(A) Heating value. The heating value must exceed 5,000 BTU/lbs. (11,500 J/g).
- (B) Viscosity. The viscosity must not exceed: 50 cs, as-fired.
- (ii) Constituent specifications. For compounds listed in Table 1 to this section, the specification levels and, where non-detect is the specification,

- minimum required detection limits are: (see Table 1 of this section).
- (2) Emission-comparable fuel specifications—The specifications shall be met as-generated. (i) Physical specifications.—(A) Heating value. The heating value must be 8,000 BTU/lbs (18,400 J/g) or greater.
- (B) Viscosity. The viscosity must not exceed 50 cs.
- (ii) Constituent specifications—(A) Except as provided by paragraph (a)(2)(ii)(B) of this section, for compounds listed in Table 1 of this section the specification levels and, where nondetect is the specification, minimum required detection limits, are: (see Table 1 of this section).
- (B) Specifications not applicable. The specification levels in Table 1 to this section do not apply for the following hydrocarbons and oxygenates under the special conditions provided under this section for emission-comparable fuel:
- (1) Benzo(a)anthracene (CAS No. 56–55–3).
- (2) Benzene (CAS No. 71-43-2).
- (3) Benzo(b)fluoranthene (CAS No. 205–99–2)
- (4) Benzo(k)fluoranthene (CAS No. 207-08-9)
 - (5) Benzo(a)pyrene (CAS No. 50–32–8)
 - (6) Chrysene (CAS No. 218-01-9)
- (7) Dibenzo(a,h)anthracene (CAS No. 52–70–3)
- (δ) 7,12–Dimethylbenz(a)anthracene (CAS No. 57–97–6)
 - (9) Flouranthene (CAS No. 206-44-0)
- (10) Indeno(1,2,3-cd)pyrene (CAS No. 193-39-5)
- (11) 3-Methlycholanthrene (CAS No. 56-49-5)
 - (12) Naphthalene (CAS No. 91–20–3)
 - (13) Toluene (CAS No. 108-88-3).
 - (14) Acetophenone (CAS No. 98-86-2).
 - (15) Acrolein (CAS No. 107-02-8).
 - (16) Allyl alcohol (CAS No. 107-18-6).
- (17) Bis(2-ethylhexyl)phthalate [Di-2-e thylhexyl phthalate] (CAS No.117-81-7).
- (18) Butyl benzyl phthalate (CAS No. 85–68–7).
- (19) o-Cresol [2-Methyl phenol] (CAS No. 95–48–7).
- (20) m-Cresol [3-Methyl phenol] (CAS No. 108–39–4).
- (21) p-Cresol [4-Methyl phenol] (CAS No.106-44-5).

Environmental Protection Agency

- (22) Di-n-butyl phthalate (CAS No. 84–74–2).
- (23) Diethyl phthalate (CAS No. 84-
- (24) 2,4-Dimethylphenol (CAS No. 105–67–9).
- (25) Dimethyl phthalate (CAS No. 131-11-3).
- (26) Di-n-octyl phthalate (CAS No. 117-84-0).
- (27) Endothall (CAS No. 145-73-3).
- (28) Ethyl methacrylate (CAS No. 97-63-2).
- (29) 2-Ethoxyethanol [Ethylene glycol monoethyl ether] (CAS No. 110–80–5).
- (30) Isobutyl alcohol (CAS No. 78–83–1).
 - (31) Isosafrole (CAS No. 120–58–1).
- (32) Methyl ethyl ketone [2-Butanone] (CAS No. 78-93-3).
- (33) Methyl methacrylate (CAS No. 80-62-6).
- (34) 1,4-Naphthoquinone (CAS No. 130–15–4).
 - (35) Phenol (CAS No. 108-95-2).
- (36) Propargyl alcohol [2-Propyn-1-ol] (CAS No. 107–19–7).
 - (37) Safrole (CAS No. 94-59-7).
- (3) Synthesis gas fuel specifications.— Synthesis gas fuel (i.e., syngas fuel) that is generated from hazardous waste must:
- (i) Have a minimum Btu value of 100 Btu/Scf:
- (ii) Contain less than 1 ppmv of total halogen;
- (iii) Contain less than 300 ppmv of total nitrogen other than diatomic nitrogen (N₂):
- (iv) Contain less than 200 ppmv of hydrogen sulfide; and
- (v) Contain less than 1 ppmv of each hazardous constituent in the target list of appendix VIII constituents of this part.
- (4) Blending to meet the specifications. (i) Comparable fuel. (A) Hazardous waste shall not be blended to meet the comparable fuel specification under paragraph (a)(1) of this section, except as provided by paragraph (a)(4)(i)(B) of this section:
- (B) Blending to meet the viscosity specification. A hazardous waste blended to meet the viscosity specification for comparable fuel shall:
- (1) As generated and prior to any blending, manipulation, or processing, meet the constituent and heating value

- specifications of paragraphs (a)(1)(i)(A) and (a)(1)(ii) of this section;
- (2) Be blended at a facility that is subject to the applicable requirements of parts 264 and 265, or §262.34 of this chapter; and
- (3) Not violate the dilution prohibition of paragraph (a)(7) of this section.
- (ii) Emission-comparable fuel. Hazardous waste shall not be treated by blending or other means to meet the emission-comparable fuel specifications under paragraph (a)(2) of this section. Emission-comparable fuel must meet those specifications as-generated by the original generator of the material. Emission-comparable fuel that has met the specifications under paragraph (a)(2) of this section as-generated, and that is subsequently commingled with other materials, must continue to meet the specifications.
- (5) Treatment to meet the comparable fuel specifications. (i) A hazardous waste may be treated to meet the specifications for comparable fuel under paragraph (a)(1) of this section provided the treatment:
- (A) Destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying hazardous constituents or materials;
- (B) Is performed at a facility that is subject to the applicable requirements of parts 264 and 265, or §262.34 of this chapter; and
- (C) Does not violate the dilution prohibition of paragraph (a)(7) of this section.
- (ii) Residuals resulting from the treatment of a hazardous waste listed in subpart D of this part to generate a comparable fuel remain a hazardous waste.
- (6) Generation of a syngas fuel. (i) A syngas fuel can be generated from the processing of hazardous wastes to meet the exclusion specifications of paragraph (a)(3) of this section provided the processing:
- (A) Destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying constituents or materials;
- (B) Is performed at a facility that is subject to the applicable requirements of parts 264 and 265, or §262.34 of this

chapter or is an exempt recycling unit pursuant to §261.6(c); and

- (C) Does not violate the dilution prohibition of paragraph (a)(7) of this section.
- (ii) Residuals resulting from the treatment of a hazardous waste listed in subpart D of this part to generate a syngas fuel remain a hazardous waste.
- (7) Dilution prohibition for comparable fuel, emission-comparable fuel, and syngas fuel. (i) Comparable fuel and syngas fuel. No generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a hazardous waste to meet the specifications of paragraphs (a)(1)(i)(A) or (a)(1)(ii) of this section for comparable fuel or paragraph (a)(3) of this section for syngas.
- (ii) *Emission-comparable fuel*. Emission-comparable fuel shall not be generated by means of dilution.
- (b) Implementation.—(1) General.—(i) Materials that meet the specifications provided by paragraph (a) of this section for comparable fuel, emission-comparable fuel, or syngas fuel are excluded from the definition of solid waste provided that the conditions under this section are met. For purposes of this section, such materials are called excluded fuel, and the person claiming and qualifying for the exclusion is called the excluded fuel generator and the person burning the excluded fuel is called the excluded fuel
- (ii) The person who generates the excluded fuel must claim the exclusion by compliance with the conditions of this section and keep records necessary to document compliance with those conditions.
- (2) Notices. (i) Notices to State RCRA and CAA Directors in authorized States or regional RCRA and CAA Directors in unauthorized States. (A) The generator must submit a one-time notice, except as provided by paragraph (b)(2)(i)(C) of this section, to the Regional or State RCRA and CAA Directors, in whose jurisdiction the exclusion is being claimed and where the excluded fuel will be burned, certifying compliance with the conditions of the exclusion and providing the following documentation:

- (1) The name, address, and RCRA ID number of the person/facility claiming the exclusion:
- (2) The applicable EPA Hazardous Waste Codes that would otherwise apply to the excluded fuel;
- (3) The name and address of the units meeting the requirements of paragraphs (b)(3) and (c) of this section, that will burn the excluded fuel:
- (4) An estimate of the average and maximum monthly and annual quantity of material for which an exclusion would be claimed, except as provided by paragraph (b)(2)(i)(D) of this section; and
- (5) The following statement, which shall be signed and submitted by the person claiming the exclusion or his authorized representative:

Under penalty of criminal and civil prosecution for making or submitting false statements, representations, or omissions, I certify that the requirements of 40 CFR 261.38 have been met for all emission-comparable fuel/comparable fuel (specify which) identified in this notification. Copies of the records and information required at 40 CFR 261.38(b)(8) are available at the generator's facility. Based on my inquiry of the individuals immediately responsible for obtaining the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

- (B) Generators of emission-comparable fuel must also include in the notices:
- (1) An estimate of the annual quantity of each material for which an emission-comparable fuel exclusion would be claimed; and
- (2) An estimate of the maximum concentration of each compound in Table 2 to this section in each emission-comparable fuel stream for which the fuel exceeds the comparable fuel specifications for those compounds in Table 1 to this section.
- (C) If there is a substantive change in the information provided in the notice required under this paragraph (b)(2)(i), the generator must submit a revised notification.
- (D) Comparable fuel and syngas fuel generators must include an estimate of the average and maximum monthly and annual quantity of material for

which an exclusion would be claimed only in notices submitted after December 19, 2008 for newly excluded comparable fuel or syngas fuel or for revised notices as required by paragraph (b)(2)(i)(C) of this section.

- (ii) Public notice. Prior to burning an excluded fuel, the burner must publish in a major newspaper of general circulation local to the site where the fuel will be burned, a notice entitled "Notification of Burning a Fuel Excluded Under the Resource Conservation and Recovery Act" and containing the following information:
- (A) Name, address, and RCRA ID number of the generating facility(ies);
- (B) Name and address of the burner and identification of the unit(s) that will burn the excluded fuel;
- (C) A brief, general description of the manufacturing, treatment, or other process generating the excluded fuel;
- (D) An estimate of the average and maximum monthly and annual quantity of the excluded fuel to be burned; and
- (E) Name and mailing address of the Regional or State Directors to whom the generator submitted a claim for the exclusion.
- (3) Burning. (i) Comparable fuel and syngas fuel. The exclusion for fuels meeting the specifications under paragraphs (a)(1) or (a)(3) of this section applies only if the fuel is burned in the following units that also shall be subject to Federal/State/local air emission requirements, including all applicable requirements implementing Section 112 of the Clean Air Act:
- (A) Industrial furnaces as defined in §260.10 of this chapter;
- (B) Boilers, as defined in §260.10 of this chapter, that are further defined as follows:
- (1) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes; or
- (2) Utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale;
- (C) Hazardous waste incinerators subject to regulation under subpart O of

parts 264 or 265 of this chapter or applicable CAA MACT standards.

- (D) Gas turbines used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale.
- (ii) Emission-comparable fuel. The exclusion for fuel meeting the specifications under paragraph (a)(2) of this section applies only if the fuel is burned under the conditions provided by paragraph (c) of this section.
- (4) Fuel analysis plan for generators. The generator of an excluded fuel shall develop and follow a written fuel analysis plan which describes the procedures for sampling and analysis of the material to be excluded. The plan shall be followed and retained at the site of the generator claiming the exclusion.
- (i) At a minimum, the plan must specify:
- (A) The parameters for which each excluded fuel will be analyzed and the rationale for the selection of those parameters;
- (B) The test methods which will be used to test for these parameters;
- (C) The sampling method which will be used to obtain a representative sample of the excluded fuel to be analyzed;
- (D) The frequency with which the initial analysis of the excluded fuel will be reviewed or repeated to ensure that the analysis is accurate and up to date; and
- (E) If process knowledge is used in the determination, any information prepared by the generator in making such determination.
- (ii) For each analysis, the generator shall document the following:
- (A) The dates and times that samples were obtained, and the dates the samples were analyzed;
- (B) The names and qualifications of the person(s) who obtained the samples;
- (C) A description of the temporal and spatial locations of the samples;
- (D) The name and address of the laboratory facility at which analyses of the samples were performed;
- (E) A description of the analytical methods used, including any clean-up and sample preparation methods;
- (F) All quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes,

- etc.), laboratory quality assurance data, and the description of any deviations from analytical methods written in the plan or from any other activity written in the plan which occurred;
- (G) All laboratory results demonstrating whether the exclusion specifications have been met; and
- (H) All laboratory documentation that support the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in paragraph (b)(9) of this section and also provides for the availability of the documentation to the claimant upon request.
- (iii) Syngas fuel generators shall submit for approval, prior to performing sampling, analysis, or any management of an excluded syngas fuel, a fuel analysis plan containing the elements of paragraph (b)(4)(i) of this section to the appropriate regulatory authority. The approval of fuel analysis plans must be stated in writing and received by the facility prior to sampling and analysis to demonstrate the exclusion of a syngas. The approval of the fuel analysis plan may contain such provisions and conditions as the regulatory authority deems appropriate.
- (5) Analysis plans for burners of emission-comparable fuel. An emission-comparable fuel burner is subject to the fuel analysis plan requirements under paragraph (b)(4) of this section to determine, for each fuel fed to the boiler when burning emission-comparable fuel, the as-fired heating value and the as-fired concentration of each compound listed in paragraph (a)(2)(ii)(B) of this section, except for fuels under the situations described below:
- (i) Coal or fuel oil used as primary fuels, when the burner uses the heating values and compound concentrations for these fuels provided in paragraph (c)(2)(ii)(C) of this section and Tables 3 and 4 to \$261.38:
- (ii) Emission-comparable fuel, when the burner receives documentation of this information from the generator for each shipment of emission-comparable fuel, provided that the emission-comparable fuel is not blended with other fuels before firing to the burner.

- (iii) Emission-comparable fuel, when the burner receives documentation of this information from the generator for each shipment of emission-comparable fuel, and the emission-comparable fuel is blended with other fuels before firing to the burner, provided that:
- (A) The burner has determined the heating value of the other fuels and the concentration of each compound listed in paragraph (a)(2)(ii)(B) of this section for the other fuels; and;
- (B) The burner determines by calculation the as-fired heating value of the blended emission-comparable fuel and the as-fired concentration of each compound listed in paragraph (a)(2)(ii)(B) of this section of the blended emission-comparable fuel.
- (6) Excluded fuel sampling and analysis. (i) General. For comparable fuel, emission-comparable fuel, and syngas for which an exclusion is claimed under the specifications provided by paragraphs (a)(1), (a)(2), or (a)(3) of this section, the generator of the material must test for all the constituents in appendix VIII to this part, except those that the generator determines, based on testing or knowledge, should not be present in the fuel. The generator is required to document the basis of each determination that a constituent with an applicable specification should not be present. The generator may not determine that any of the following categories of constituents with a specification in Table 1 to this section should not be present:
- (A) A constituent that triggered the toxicity characteristic for the constituents that were the basis for listing the hazardous secondary material as a hazardous waste, or constituents for which there is a treatment standard for the waste code in 40 CFR 268.40;
- (B) A constituent detected in previous analysis of the material;
- (C) Constituents introduced into the process that generates the material; or
- (D) Constituents that are byproducts or side reactions to the process that generates the material.

NOTE TO PARAGRAPH (B)(6)(I): Any claim under this section must be valid and accurate for all hazardous constituents; a determination not to test for a hazardous constituent will not shield a generator from liability should that constituent later be

found in the fuel/syngas above the exclusion specifications.

- (ii) Use of process knowledge. (A) Comparable fuel and syngas. For each material for which the comparable fuel or syngas exclusion is claimed where the generator of the excluded fuel is not the original generator of the hazardous waste, the generator of the excluded fuel may not use process knowledge pursuant to paragraph (b)(6)(i) of this section and must test to determine that all of the constituent specifications of paragraphs (a)(1) and (a)(3) of this section, as applicable, have been met.
- (B) Emission-comparable fuel. Emission-comparable fuel must meet the specifications for exclusion as-generated. Thus, the generator may use process knowledge to determine that compounds listed in Appendix VIII to this part are not present in the emission-comparable fuel.
- (iii) The excluded fuel generator may use any reliable analytical method to demonstrate that no constituent of concern is present at concentrations above the specification levels. It is the responsibility of the generator to ensure that the sampling and analysis are unbiased, precise, and representative of the excluded fuel. For the fuel to be eligible for exclusion, a generator must demonstrate that:
- (A) The 95% upper confidence limit of the mean concentration for each constituent of concern is not above the specification level; and
- (B) The analyses could have detected the presence of the constituent at or below the specification level.
- (iv) Nothing in this paragraph (b)(6) preempts, overrides or otherwise negates the provision in §262.11 of this chapter, which requires any person who generates a solid waste to determine if that waste is a hazardous waste.
- (v) In an enforcement action, the burden of proof to establish conformance with the exclusion specification shall be on the generator claiming the exclusion.
- (vi) The generator must conduct sampling and analysis in accordance with the fuel analysis plan developed under paragraph (b)(4) of this section.
- (vii) Viscosity condition for comparable fuel. (A) Excluded comparable fuel that

has not been blended to meet the kinematic viscosity specification shall be analyzed as-generated.

- (B) If hazardous waste is blended to meet the kinematic viscosity specification for comparable fuel, the generator shall:
- (1) Analyze the hazardous waste asgenerated to ensure that it meets the constituent and heating value specifications of paragraph (a)(1) of this section; and
- (2) After blending, analyze the fuel again to ensure that the blended fuel meets all comparable fuel specifications.
- (viii) Excluded fuel must be re-tested, at a minimum, annually and must be retested after a process change that could change its chemical or physical properties in a manner that may affect conformance with the specifications.
- (ix) An emission-comparable fuel burner must determine, for each fuel fired to the burner, the as-fired heating value of the emission-comparable fuel and the as-fired concentration of each compound listed in paragraph (a)(2)(ii)(B) of this section using information provided by the generator, information provided by paragraph (c)(2)(ii)(C) of this section and Tables 3 and 4 to this section, by sampling and analysis, or by calculation when emission-comparable fuel is commingled with other fuels and the heating value of the emission comparable fuel and the concentration of each compound listed in paragraph (a)(2)(ii)(B) of this section is known for the fuels prior to commingling.
- (7) Speculative accumulation. Excluded fuel must not be accumulated speculatively, as defined in §261.1(c)(8).
- (8) Operating record. The generator must maintain an operating record on site containing the following information:
- (i) All information required to be submitted to the implementing authority as part of the notification of the claim:
- (A) The owner/operator name, address, and RCRA ID number of the person claiming the exclusion;
- (B) For each excluded fuel, the EPA Hazardous Waste Codes that would be applicable if the material were discarded; and

- (C) The certification signed by the person claiming the exclusion or his authorized representative.
- (ii) A brief description of the process that generated the excluded fuel. If the comparable fuel generator is not the generator of the original hazardous waste, provide a brief description of the process that generated the hazardous waste:
- (iii) The monthly and annual quantities of each fuel claimed to be excluded:
- (iv) Documentation for any claim that a constituent is not present in the excluded fuel as required under paragraph (b)(6) of this section;
- (v) The results of all analyses and all detection limits achieved as required under paragraph (b)(4) of this section;
- (vi) If the comparable fuel was generated through treatment or blending, documentation of compliance with the applicable provisions of paragraphs (a)(4) and (a)(5) of this section;
- (vii) If the excluded fuel is to be shipped off-site, a certification from the burner as required under paragraph (b)(10) of this section;
- (viii) The fuel analysis plan and documentation of all sampling and analysis results as required by paragraph (b)(4) of this section; and
- (ix) If the generator ships excluded fuel off-site for burning, the generator must retain for each shipment the following information on-site:
- (A) The name and address of the facility receiving the excluded fuel for burning:
- (B) The quantity of excluded fuel
- shipped and delivered; (C) The date of shipment or delivery;
- (D) A cross-reference to the record of excluded fuel analysis or other information used to make the determination that the excluded fuel meets the specifications as required under paragraph (b)(4) of this section; and
- (E) A one-time certification by the burner as required under paragraph (b)(10) of this section.
- (9) Records retention. Records must be maintained for a period of three years.
- (10) Burner certification to the generator.—(i) Comparable fuel and syngas fuel. Prior to submitting a notification to the State and Regional Directors, a generator of comparable fuel or syngas

- fuel excluded under paragraphs (a)(1) or (a)(3) of this section who intends to ship the excluded fuel off-site for burning must obtain a one-time written, signed statement from the burner:
- (A) Certifying that the excluded fuel will only be burned in an industrial furnace, industrial boiler, utility boiler, or hazardous waste incinerator, as required under paragraph (b)(3) of this
- (B) Identifying the name and address of the facility that will burn the excluded fuel; and
- (C) Certifying that the state in which the burner is located is authorized to exclude wastes as excluded fuel under the provisions of this section.
- (ii) Emission-comparable fuel. Prior to submitting a notification to the State and Regional Directors, a generator of emission-comparable fuel who intends to ship the excluded fuel off-site for burning must obtain a one-time written, signed statement from the burner:
- (A) Certifying that the excluded fuel will be stored under the conditions of paragraphs (c)(1) or (e) of this section and burned under the conditions of paragraph (c)(2) of this section, and that the burner will comply with the notification, reporting, and recordkeeping conditions of paragraph (c)(5) of this section:
- (B) Identifying the name and address of the facility that will burn the excluded fuel: and
- (C) Certifying that the state in which the burner is located is authorized to exclude wastes as excluded fuel under the provisions of this section.
- (11) Ineligible waste codes. Wastes that are listed as hazardous waste because of the presence of dioxins or furans, as set out in appendix VII of this part, are not eligible for these exclusions, and any fuel produced from or otherwise containing these wastes remains a hazardous waste subject to full RCRA hazardous waste management requirements.
- (12) Regulatory status of boiler residues. Burning excluded fuel that was otherwise a hazardous waste listed under §§ 261.31 through 261.33 does not subject boiler residues, including bottom ash and emission control residues, to regulation as derived-from hazardous wastes.

Environmental Protection Agency

- (13) Residues in containers and tank systems upon cessation of operations. (1) Liquid and accumulated solid residues that remain in a container or tank system for more than 90 days after the container or tank system ceases to be operated for storage or transport of excluded fuel product are subject to regulation under parts 262 through 265, 268, 270, 271, and 124 of this chapter.
- (ii) Liquid and accumulated solid residues that are removed from a container or tank system after the container or tank system ceases to be operated for storage or transport of excluded fuel product are solid wastes subject to regulation as hazardous waste if the waste exhibits a characteristic of hazardous waste under \$\frac{8}{2}61.21 through 261.24 or if the fuel were otherwise a hazardous waste listed under \$\frac{8}{2}61.31 through 261.33 when the exclusion was claimed.
- (iii) Liquid and accumulated solid residues that are removed from a container or tank system and which do not meet the specifications for exclusion under paragraphs (a)(1) or (a)(2) of this section are solid wastes subject to regulation as hazardous waste if:
- (A) The waste exhibits a characteristic of hazardous waste under §§ 261.21 through 261.24; or
- (B) If the fuel were otherwise a hazardous waste listed under §§261.31 through 261.33. The hazardous waste code for the listed waste applies to these liquid and accumulated solid resides.
- (14) Waiver of RCRA Closure Requirements. Interim status and permitted storage and combustion units, and generator storage units exempt from the permit requirements under §262.34 of this chapter, are not subject to the closure requirements of 40 CFR Parts 264, 265, and 267 provided that the storage and combustion unit has been used to manage only hazardous waste that is subsequently excluded under the conditions of this section, and that afterward will be used only to manage fuel excluded under this section.
- (15) Spills and leaks. (i) Excluded fuel that is spilled or leaked and that therefore no longer meets the conditions of the exclusion is discarded and must be managed as a hazardous waste if it exhibits a characteristic of hazardous

- waste under §§ 261.21 through 261.24 or if the fuel were otherwise a hazardous waste listed in §§ 261.31 through 261.33.
- (ii) For excluded fuel that would have otherwise been a hazardous waste listed in §§ 261.31 through 261.33 and which is spilled or leaked, the hazardous waste code for the listed waste applies to the spilled or leaked material.
- (16) Nothing in this section preempts, overrides, or otherwise negates the provisions in CERCLA Section 103, which establish reporting obligations for releases of hazardous substances, or the Department of Transportation requirements for hazardous materials in 49 CFR parts 171 through 180.
- (c) Special conditions for emission-comparable fuel. The following additional conditions apply to emission-comparable fuel—fuel that meets the specifications under paragraph (a)(2) of this section.
- (1) Storage. (i) General. Emission-comparable fuel may be stored in a container or tank under the conditions of paragraphs (c)(1)(iii) through (c)(1)(viii) of this section, or alternative conditions under paragraph (e) of this section.
- (ii) Prohibition on underground storage. Emission-comparable fuel shall not be stored in an underground tank. An underground tank is a tank the volume of which (including the volume of underground pipes connecting thereto) is 10 percent or more beneath the surface of the ground.
- (iii) Spill prevention, control, and countermeasures (SPCC) requirements. Emission-comparable fuel storage tanks and containers with a capacity equal to or greater than 0.1 m³ (26 gallons) are subject to the following Spill Prevention, Control, and Countermeasures (SPCC) requirements adopted from 40 CFR Part 112. To satisfy the adopted conditions, you must substitute the term "emission-comparable fuel" for the term "oil," and by substituting the term "release of emission-comparable fuel to the environment" for the term "discharge as described in §112.1(b)."
- (A) Section 112.2, Definitions. These definitions apply to the adopted SPCC requirements under paragraphs (c)(1)(iii)(B) through (c)(1)(iii)(D) of this section.

- (B) Sections 112.3(d) and 112.3(e) of this chapter, Requirement to Prepare and Implement a Spill Prevention, Control, and Countermeasure Plan. (I) You must prepare a SPCC Plan in writing, and in accordance with the adopted provisions of §§ 112.7 and 112.8 of this chapter;
- (2) The SPCC Plan must be reviewed and certified according to the provisions of §112.3(d) of this chapter and must be made available to the Regional Administrator according to the provisions of §112.3(e) of this chapter;
- (3) You must amend your SPCC Plan as directed by the Regional Administrator upon a finding that amendment is necessary to prevent and contain releases of emission-comparable fuel from your facility. You must implement the amended SPCC Plan as soon as possible, but not later than six months after you amend your SPCC Plan, unless the Regional Administrator specifies another date;
- (C) Sections 112.5(a) and 112.5(b) of this chapter, Amendment of Spill Prevention, Control, and Countermeasures Plan by Owners or Operators. (I) You must comply with the provisions of §112.5(a) and (b) of this chapter by substituting the term "release of emission-comparable fuel to the environment" for the term "discharge as described in §112.1(b);"
- (2) You must have a Professional Engineer certify any technical amendment to your Plan in accordance with \$112.3(d) of this chapter.
- (D) Section 112.7 of this chapter, General Requirements for Spill Prevention, Control, and Countermeasure Plans. (1) You must comply with the requirements of §112.7, except for paragraphs (a)(2), (c), (d), and (k) of that section.
- (2) Your Plan may deviate from the requirements §112.7(g), (h)(2), (h)(3) and (i), and the adopted provisions of §112.8, where applicable to a specific facility, if you provide equivalent protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in §112.7(g), (h)(2), (h)(3) and (i) and the adopted provisions of §112.8 of this chapter, you must state the reasons for nonconformance in your Plan and describe in de-

- tail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan do not provide equivalent environmental protection, he may require that you amend your Plan.
- (E) Section 112.8 of this chapter, Spill Prevention, Control, and Countermeasure Plan Requirements for Onshore Facilities, except for paragraph (b) of this section (facility drainage), paragraph (c)(2) of this section (secondary containment for bulk storage containers), paragraph (c)(4) of this section (protection of completely buried storage tanks), and paragraph (c)(11) of this section (secondary containment for mobile containers), with the following revisions:
- (1) You must inspect at least weekly areas where portable containers are stored to look for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.
- (2) Section 112.8(d)(1) of this chapter applies to all buried piping irrespective of the installation or replacement date.
- (iv) Containment and detection of releases—(A) Tanks. To prevent the release of emission comparable fuel or hazardous constituents to the environment, you must provide secondary containment for emission-comparable fuel tank systems as prescribed by the following requirements adopted from §264.193 of this chapter. To satisfy the adopted conditions, you must substitute the term "emission-comparable fuel" for the term "waste," and substitute the term "document in the record" for the term "demonstrate to the Regional Administrator."
- (I) Section 264.193(b) of this chapter, which prescribes general performance standards for secondary containment systems;
- (2) Section 264.193(c) of this chapter, which prescribes minimum requirements for secondary containment systems:
- (3) Section 264.193(d)(1) through (3), which prescribes permissible secondary containment devices:
- (4) Section 264.193(e) of this chapter, which prescribes design and operating

requirements for the permissible secondary containment devices; and

- (5) Section 264.193(f) of this chapter, which prescribes secondary containment requirements for ancillary equipment.
- (B) Portable containers. To prevent the release of emission comparable fuel or hazardous constituents to the environment, you must provide containment for emission-comparable fuel container storage units as prescribed by the provisions of §264.175(b) of this chapter, which are hereby adopted for emission-comparable fuel container storage units. To satisfy the adopted condition, you must substitute the term "emission-comparable fuel" for each occurrence of the term "waste."
- (v) Preparedness and prevention, emergency procedures and response to releases.—(A) Preparedness and prevention.—(I) Required equipment. Your facility must be equipped with the equipment required under §264.32(a) through (d) of this chapter in a manner that it can be used in emergencies associated with storing and handling emission-comparable fuel.
- (2) Testing and maintenance of equipment. You must test and maintain as necessary to assure proper operation in times of emergency all communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment required for your emission-comparable fuel tank system or container storage unit.
- (3) Access to communications or alarm system. Whenever emission comparable fuel is distributed into or out of the tank system or container storage unit, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee.
- (4) Arrangements with local authorities. You must comply with §264.37(a) of this chapter. If state or local authorities decline to enter into the arrangements prescribed by §264.37(a) of this chapter, you must keep a record documenting the refusal.
- (B) Emergency procedures.—(1) Emergency coordinator. At all times, there must be at least one employee either

- on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's Spill Prevention, Control, and Countermeasures (SPCC) Plan required under paragraph (c)(1)(iii) of this section, all emission-comparable fuel operations and activities at the facility, the location and characteristics of emissioncomparable fuel handled, the location of all records within the facility pertaining to emission-comparable fuel. and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the SPCC Plan.
- (2) Emergency procedures.—(i) Whenever there is an imminent or actual emergency situation relating to the emission-comparable fuel tank system or container storage unit, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately activate internal facility alarms or communication systems, where applicable, to notify all facility personnel and notify appropriate state or local agencies with designated response roles if their help is needed.
- (ii) Whenever there is a release, fire, or explosion relating to the emission-comparable fuel tank system or container storage unit, the emergency coordinator must immediately identify the character, exact source, amount, and aerial extent of any released materials. He may do this by observation or review of facility records, and, if necessary, by chemical analysis.
- (iii) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).

- (iv) If the emergency coordinator determines that the facility has had a release, fire, or explosion associated with the emission-comparable fuel tank system or container storage unit which could threaten human health or the environment outside the facility, he must report his findings as provided by paragraph (c)(1)(v)(B)(2)(v) of this section.
- (v) If the emergency coordinator's assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated, and he must immediately notify either the government official designated as the on-scene coordinator for that geographical area, (in the applicable regional contingency plan under part 300 of this title) or the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include: the name and telephone number of the reporter; the name and address of the facility; the time and type of incident (e.g., release, fire); the name and quantity of material(s) involved, to the extent known; the extent of injuries, if any; and the possible hazards to human health, or the environment, outside the facility.
- (vi) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other materials at the facility. These measures must include, where applicable, stopping processes and operations and collecting and containing released emission-comparable fuel.
- (vii) If the emission-comparable fuel tank system or container storage unit stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.
- (viii) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered emission-comparable fuel, contaminated soil or surface water, or any other material that

- results from a release, fire, or explosion at the facility.
- (ix) The emergency coordinator must ensure that, in the affected area(s) of the facility: materials that may be incompatible with the released emission-comparable fuel is treated, stored, or disposed of until cleanup procedures are completed; and all emergency equipment listed in the SPCC Plan is cleaned and fit for its intended use before operations are resumed.
- (x) You must note in the record the time, date, and details of any incident that requires implementing the SPCC Plan for the emission-comparable fuel tank system or container storage unit. Within 15 days after the incident, you must submit a written report on the incident to the Regional Administrator. The report must include: the name, address, and telephone number of the owner or operator; the name, address, and telephone number of the facility; the date, time, and type of incident (e.g., fire, explosion); the name and quantity of material(s) involved; the extent of injuries, if any; an assessment of actual or potential hazards to human health or the environment, where this is applicable; and the estimated quantity and disposition of recovered material that resulted from the incident.
- (C) Response to leaks or spills and disposition of leaking or unfit-for-use tank systems. (1) You must comply with the provisions of §264.196 of this chapter, except for §264.196(e)(1) and (e)(4) of this chapter.
- (2) To satisfy the adopted provisions of §264.196, you must substitute the term "emission-comparable fuel" for the terms "hazardous waste" and "waste."
- (3) Unless you satisfy the requirements of §264.196(e)(2) and (3) of this chapter, you must immediately cease using the tank system to store emission-comparable fuel and remove any liquid and solid residues under the conditions of paragraph (b)(13) of this section.
- (vi) Air emissions conditions adopted from part 63, subpart EEEE.—(A) Applicability—(1) If your emission-comparable fuel storage, transfer, and transport equipment is not subject to the controls provided by §63.2346 of this

chapter, you must determine whether you are subject to the provisions of paragraphs (c)(1)(vi)(B) and (C) of this section:

- (2) If your emission-comparable fuel storage tank is subject to the controls provided by §63.2346 of this chapter other than those prescribed by item 6 in Table 2 to subpart EEEE, part 63 of this chapter (i.e., requirements for organic liquids with an annual average true vapor pressure of the total listed organic HAP >=76.6 kilopascals (11.1 psia)), you must determine whether the tank would be subject to the controls prescribed by item 6 after considering the vapor pressure of the RCRA oxygenates listed in paragraph (c)(1)(vi)(B)(3) of this section as well as the organic HAP listed in Table 1 to subpart EEEE, part 63 of this chapter. If the annual average true vapor pressure of the total RCRA oxygenates and Table 1 organic HAP in the emissioncomparable fuel is >=76.6 kilopascals (11.1 psia), you are subject to the requirements of paragraphs (c)(1)(vi)(B) through (C) of this section.
- (B) Conditions of applicability. To satisfy the conditions under paragraph (c)(1)(vi)(C) of this section that are adopted from part 63, subpart EEEE of this chapter, you must:
- (1) Satisfy the conditions irrespective of whether your facility is an area source as defined by §63.2 of this chapter.
- (2) Substitute the term "RCRA oxygenates as well as organic HAP" for each occurrence of the term "organic HAP"; the term "RCRA oxygenates as well as organic HAP listed in Table 1" for each occurrence of the term "organic HAP listed in Table 1"; and the term "RCRA oxygenates as well as Table 1 organic HAP" for each occurrence of the term "Table 1 organic HAP".
- (3) Use the following definition of RCRA oxygenates: The term "RCRA oxygenates" means the following organic compounds:
 - (i) Allyl alcohol (CAS No. 107-18-6);
- (ii) Bis(2-ethylhexyl)phthalate [Di-2-e thylhexyl phthalate] (CAS No.117-81-7);
- (*iii*) 2,4-Dimethylphenol (CAS No. 105–67–9);

- (iv) Ethyl methacrylate (CAS No. 97-63-2);
- (v) 2-Ethoxyethanol [Ethylene glycol monoethyl ether] (CAS No. 110-80-5);
- (vi) Isobutyl alcohol (CAS No. 78–83–1);
 - (vii) Isosafrole (CAS No. 120-58-1);
- (viii) Methyl ethyl ketone [2-Butanone] (CAS No. 78-93-3);
- (*ix*) 1,4-Naphthoquinone (CAS No. 130–15–4):
- (x) Propargyl alcohol [2-Propyn-1-ol] (CAS No. 107–19–7); and
 - (xi) Safrole (CAS No. 94-59-7).
- (4) Use the following definition of organic liquid. Organic liquid means emission comparable fuel that:
- (i) Contains 5 percent by weight or greater of the RCRA oxygenates as well as organic HAP listed in Table 1 to this subpart, as determined using the procedures specified in §63.2354(c) of this chapter; and
- (ii) Has an annual average true vapor pressure of 0.7 kilopascals (0.1 psia) or greater.
- (5) Use the following definition of affected source. Affected source means the collection of activities and equipment used to distribute organic liquids into, out of, or within a facility.
- (6) Substitute the term "subject to \$261.38(c)(1)(vi)(C)of this chapter" for each occurrence of the term "subject to this subpart".
 - (7) Satisfy the conditions if:
- (i) Your organic liquids transfer equipment is exempt from subpart EEEE, part 63 of this chapter, under the provisions of §63.228(c)(1) of this chapter, which exempts organic liquids transfer equipment at facilities subject to a NESHAP other than subpart EEEE, part 63; and
- (ii) The requirements applicable to the organic liquids transfer equipment under the other NESHAP are not equivalent to, at a minimum, the conditions under paragraphs (c)(1)(vi)(C) (c)(1)(vii), or (e) of this section. You must document and record your determination whether the requirements under the other NESHAP are less stringent than the conditions under paragraph (c)(1)(vi)(C) of this section. You may contact the RCRA regulatory authority to assist with this determination.

- (8) Submit all notifications, reports, and other communications to the RCRA regulatory authority rather than the CAA regulatory authority.
- (C) Conditions to control air emissions under provisions adopted from part 63, subpart EEEE of this chapter. (1) The affected source is the equipment identified under §63.2338(b)(1) through (5) of this chapter, except for equipment identified in §63.2338(c)(2) through (3) of this chapter.
- (2) Definitions of new, reconstructed, and existing affected sources are provided under §63.2338(d) through (f) of this chapter.
- (3) You must comply with the emission limitations, operating limits, and work practice standards under §63.2346 of this chapter.
- (4) You must comply with the general requirements under §63.2350 of this chapter. The startup, shutdown, and malfunction plan required by §63.2350(c) of this chapter need not address equipment not subject to paragraph (c)(1)(vi)(C) of this section.
- (5) You must comply with the performance tests, design evaluation, and performance evaluation requirements under §63.2354 of this chapter. When complying with §63.2354(c) of this chapter, however, you must determine the content of RCRA oxygenates as well as organic HAP in the emission-comparable fuel.
- (6) You must conduct performance tests and other initial compliance demonstrations prior to managing emission-comparable fuel in the storage unit.
- (7) You must conduct subsequent performance tests by the dates specified in §63.2362 of this chapter.
- (8) You must comply with the monitoring, installation, operation, and maintenance requirements under §63.2366 of this chapter.
- (9) You must demonstrate initial compliance with the emission limitations, operating limits, and work practice standards as required under §63.2370 of this chapter.
- (10) You must monitor and collect data to demonstrate continuous compliance and use the collected data as required by §63.2374 of this chapter.
- (11) You must demonstrate continuous compliance with the emission

- limitations, operating limits, and work practice standards as required by §63.2378 of this chapter.
- (12) You must submit the notifications and on the schedule required by §63.2382 of this chapter, except that initial notifications must be submitted prior to managing emission-comparable fuel in the storage unit. Notifications must be submitted to the RCRA regulatory authority.
- (13) You must submit the reports and on the schedule required by §63.2386 of this chapter. Reports must be submitted to the RCRA regulatory authority.
- (14) You must keep the applicable records required by §63.2390 of this chapter.
- $(\overline{15})$ You must keep records in the form, and for the duration, required by $\S 63.2394$ of this chapter.
- (16) The parts of the General Provisions that apply to you are provided by §63.2398 of this chapter.
- (17) The definitions that apply to the conditions under paragraph (c)(1)(vi)(C) of this section are provided by §63.2406 of this chapter, and paragraphs (c)(1)(vi)(B)(3) through (5) of this section.
- (18) You are subject to the requirements in Tables 1–12 to subpart EEEE, part 63 of this chapter.
- (vii) Air emissions conditions for tanks and containers that are not subject to conditions adopted from part 63, subpart EEEE. Tank and container storage units that are not subject to the conditions adopted from subpart EEEE, part 63 under paragraph (c)(1)(vi) of this section are subject to the conditions of this paragraph.
- (A) Tanks. (1) $Level\ 1$ control. (i) $Applicability\ criteria.$ Tanks that meet the following vapor pressure limitations for emission-comparable fuel for the tank size designations are subject to the air emission controls under paragraph (c)(1)(vii)(A)(1)(ii) of this section:
- (A) For a tank design capacity equal to or greater than 151 m³ (40,000 gallons), the annual average organic vapor pressure limit for the tank is 5.2 kPa (0.75 psia);
- (B) For a tank design capacity equal to or greater than 75 m³ (20,000 gallons) but less than 151 m³ (40,000 gallons), the annual average organic vapor pressure

limit for the tank is 27.6 kPa (4.0 psia); and

- (C) For a tank design capacity less than 75 m³ (20,000 gallons), the annual average vapor pressure limit for the tank is 76.6 kPa (11.1 psia);
- (ii) Conditions to control emissions. You must comply with the following requirements:
- (A) NESHAP provisions for level 1 control under subpart OO, part 63. Sections 63.901 through 63.907 of this chapter; or
- (B) NESHAP provisions for organic liquid distribution under subpart EEEE, part 63. The provisions under Item 1.a.i or 1.a.ii which require venting to a control device under provisions of subpart SS, part 63 of this chapter, or Level 2 tank emissions control under subpart WW, part 63 of this chapter, or routing emissions to a fuel gas system or back to a process under §63.984 of subpart SS, part 63 of this chapter, or vapor balancing emissions to the transport vehicle from which the storage tank is filled under §63.2346(a)(4); or
- (C) Hazardous waste tank controls under subpart CC, part 264. The provisions for additional options provided for hazardous waste tanks under $\S264.1084(d)(3)$, (d)(4), or (d)(5) of this chapter for use of venting to a control device, a pressure tank, or a tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device, and associated provisions §§ 63.1081 (definitions), 264.1083(c) (determination of vapor pressure), 264.1084(j) (transfer to a tank), 264.1087 (closedvent systems and control devices), and 264.89(b) (recordkeeping) of this chapter. To satisfy these adopted provisions, you must substitute the term "emission-comparable fuel" for the terms "hazardous waste" and "waste."
- (2) Level 2 control. (i) Applicability criteria. Tanks that do not meet the vapor pressure limitations for emission-comparable fuel for the tank size designations under paragraph (c)(1)(vii)(A)(1)(i) of this section are subject to the air emission controls under paragraph (c)(1)(vii)(A)(2)(ii) of this section.
- (ii) Conditions to control emissions. To satisfy the conditions to control emissions, you must comply with the requirements under paragraphs

- (c)(1)(vii)(A)(1)(ii)(B) or (C) of this section.
- (3) Equipment leaks. For each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, or flange or other connector, and any control devices or systems used to manage emission-comparable fuel in a tank system subject to paragraph (c)(1)(vii)(A) of this section, you must comply with the applicable requirements under 40 CFR part 63, subpart TT (control level 1), except for §63.1000; or subpart UU (control level 2), except for §63.1019; or subpart H, except for §63.160, 63.162(b) and (e), and 63.183.
- (B) Containers. (1) Level 1 control. (i) Applicability criteria. Containers that meet the following criteria are subject to the air emission controls under paragraph (c)(1)(vii)(B)(1)(ii) of this section:
- (A) Containers having a design capacity greater than $0.1~\rm{m}^3$ and less than or equal to $0.46~\rm{m}^3$;
- (B) Containers having a design capacity greater than 0.46 m³ that are not in light liquid service, as defined in §264.1031 of this chapter.
- (C) Containers having a design capacity greater than 0.46 m³ that are in light liquid service, as defined in §264.1031 of this chapter.
- (ii) Conditions to control emissions. To satisfy the conditions on Level I control of emissions, you must comply with the following requirements:
- (A) The NESHAP provisions for containers under subpart PP, part 63 at §§63.922 (level 1 control) or 63.923 (level 2 control) of this chapter; and
- (B) The ancillary provisions under subpart PP, part 63 at §63.921 (definitions), 63.925 (test methods and procedures), 63.926 (inspection and monitoring requirements), 63.927 (record-keeping requirements), and 63.928 (reporting requirements) of this chapter.
- (2) Level 2 control. (i) Applicability criteria. Containers that do not meet the criteria under paragraph (c)(1)(vii)(B)(1)(i) of this section are subject to the air emission controls under paragraph (c)(1)(vii)(B)(2)(ii) of this section.

- (ii) Conditions to control emissions. To satisfy the conditions on Level II control of emissions, you must comply with the following requirements:
- (A) The NESHAP provisions for containers under subpart PP, part 63 at §63.923 (level 2 control) of this chapter; and
- (B) The ancillary provisions under subpart PP, part 63 at §§63.921 (definitions), 63.925 (test methods and procedures), 63.926 (inspection and monitoring requirements, 63.927 (record-keeping requirements), and 63.928 (reporting requirements) of this chapter.
- (3) Equipment leaks. For each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, or flange or other connector, and any control devices or systems used to manage emission-comparable fuel in a container subject to paragraph (c)(1)(vii)(B) of this section, you must comply with the applicable requirements under 40 CFR part 63, subpart TT (control level 1), except for §63.1000; or subpart UU (control level 2), except for §63.1019; or subpart H, except for §63.160, 63.162(b) and (e), and 63.183.
- (viii) Management of incompatible fuels and other materials—(A) Generators and burners of emission-comparable fuel must document in the fuel analysis plan under paragraph (b)(4) of this section how (e.g., using trial tests, analytical results, scientific literature, or process knowledge) precautions will be taken to prevent mixing of excluded fuels and other materials which could result in reactions which:
- (1) Generate extreme heat or pressure, fire or explosions, or violent reactions;
- (2) Produce uncontrolled toxic mists, fumes, dusts, or gases;
- (3) Produce uncontrolled flammable fumes or gases; or
- (4) Damage the structural integrity of the storage unit or facility.
- (B) Burners that blend emission-comparable fuel with other fuels but that are exempt from fuel analysis requirements under paragraphs (b)(4) and (b)(5)(iii) of this section must document in the operating record how precautions will be taken to prevent mixing of emission-comparable fuel with other fuels which could result in the

- reactions listed in paragraph (c)(viii)(A) of this section.
- (C) Incompatible fuels must not be placed in the same tank or container.
- (2) Burning. (i) Types of combustors that may burn emission-comparable fuel. Emission-comparable fuel must be burned in a boiler meeting the conditions of paragraph (c)(2)(i)(A) of this section or a hazardous waste combustor under the conditions of paragraph (c)(2)(i)(B) of this section.
- (A) Boilers. Emission-comparable fuel may be burned in an industrial or utility boiler as defined in paragraph (b)(3) of this section but that is further restricted by being a watertube type of steam boiler that does not feed fuel using a stoker or stoker-type mechanism.
- (B) Hazardous waste combustors. (1) Emission-comparable fuel may be burned in an incinerator, cement kiln, lightweight aggregate kiln, boiler, or halogen acid production furnace operating under a RCRA permit issued under part 270 of this chapter and in compliance with the applicable provisions of subpart O of part 264, subpart H of part 266, or subpart EEE of part 63 of this chapter, provided that the emission-comparable fuel is burned under the same operating requirements that apply to hazardous waste burned by the combustor.
- (2) When emission-comparable fuel is burned in a hazardous waste combustor under the provisions of paragraph (c)(2)(i)(B) of this section, the operating conditions under paragraph (c)(2)(ii) of this section do not apply, except for:
- (i) The emission-comparable fuel constituent feedrate conditions under paragraph (c)(2)(ii)(C) of this section continue to apply; and
- (ii) The emission-comparable fuel automatic feed cutoff system requirements under paragraph (c)(2)(ii)(G) of this section that apply to monitoring the constituent feedrate limits as specified under paragraph (c)(2)(ii)(G)(I)(ii) of this section continue to apply.
- (ii) Operating conditions—(A) Primary fuels. (1) A minimum of 50 percent of fuel fired to the boiler shall be fossil fuel, fuels derived from fossil fuel, tall oil, or comparable fuel meeting the specifications provided by paragraph

- (a)(1) of this section. Such fuels are termed "primary fuel" for purposes of this section. (Tall oil is a fuel derived from vegetable and rosin fatty acids.) The primary fuel shall comprise at least 50% of the total fuel heat input to the boiler and at least 50% of the total fuel mass input to the boiler.
- (2) The primary fuel firing rate shall be continuously monitored and the minimum primary fuel firing rate limit shall be achieved on an hourly rolling average basis;
- (B) Fuel heating value. Primary fuels shall have a minimum as-fired heating value of 8,000 Btu/lb, and each material fired in a firing nozzle where emission-comparable fuel is fired must have a heating value of at least 8,000 Btu/lb, as-fired;
- (C) Feedrate limits for emission-comparable fuel constituents. The total feedrate, considering all combustor feedstreams, of each emission-comparable fuel constituent listed under paragraph (a)(2)(ii)(B) of this section shall not exceed the limit provided by Table 2 to this section.
- (1) The feedrate limits are expressed as gas flowrate-normalized feedrates in the units "ug/dscm".
- (2) The feedrate limit for total combustor feedstreams expressed as mass/unit time (kg/hr) for each emission-comparable fuel constituent is determined by multiplying the gas flowrate-normalized feedrate limit provided by Table 2 to this section times the combustor gas flowrate.
- (3) The maximum constituent feedrate (kg/hr) attributable to emission-comparable fuel is the total combustor constituent feedrate (kg/hr) minus the constituent feedrate (kg/hr) for all other combustor feedstreams.
- (4) To account for emission-comparable fuel constituents in primary fuels, burners may use measured concentrations of the constituents, or:
- (i) If natural gas is used as a primary fuel, burners may assume that natural gas does not contain emission-comparable fuel constituents and that natural gas has a heating value of 22,000 Rtu/lb:
- (ii) If fuel oil is used as a primary fuel, burners may use the default concentrations for emission-comparable fuel constituents provided in Table 3 to

- this section, and assume that fuel oil has a heating value of 19,200 Btu/lb; and
- (iii) If coal is used as a primary fuel, burners may use the default concentrations for emission-comparable fuel constituents provided in Table 4 to this section, and assume that coal has a heating value of 11,100 Btu/lb.
- (5) The feedrate of each emission-comparable fuel constituent shall be continuously monitored (by knowing the concentration of the constituent in each feedstream and by monitoring the feedrate of each feedstream), and the maximum feedrate limit for each constituent shall not be exceeded on an hourly rolling average basis.
- (D) CO CEMS. When burning emission-comparable fuel, carbon monoxide emissions must not exceed 100 parts per million by volume, over an hourly rolling average (monitored with a continuous emissions monitoring system (CEMS)), dry basis and corrected to 7 percent oxygen. You must use an oxygen CEMS to continuously correct the carbon monoxide level to 7 percent oxygen. You must install, calibrate, maintain, and continuously operate the CEMS in compliance with the quality assurance procedures provided in the appendix to subpart EEE of part 63 of this chapter (Quality Assurance Procedures for Continuous Emissions Monitors Used for Hazardous Waste Combustors) and Performance Specification 4B (carbon monoxide and oxygen) in appendix B, part 60 of this chapter.
- (E) Dioxin/furan control—(1) If the boiler is equipped with a dry particulate matter control device and the primary fuel is not coal, you must continuously monitor the combustion gas temperature at the inlet to the dry particulate matter control device, and the gas temperature must not exceed 400 °F on an hourly rolling average
- (2) Calibration of thermocouples. The calibration of thermocouples must be verified at a frequency and in a manner consistent with manufacturer specifications, but no less frequently than once per year.
- (F) Calculation of rolling averages—(1) Calculation of rolling averages upon intermittent operations. You must ignore periods of time when one-minute values are not available for calculating

the hourly rolling average. When oneminute values become available again, the first one-minute value is added to the previous 59 values to calculate the hourly rolling average.

- (2) Calculation of rolling averages when the emission-comparable fuel feed is cutoff. You must continue monitoring carbon monoxide and combustion gas temperature at the inlet to the dry particulate matter emission control device when the emission-comparable fuel feed is cutoff, but the source continues operating on other fuels. You must not resume feeding emission-comparable fuel if the emission levels exceed the provided paragraphs limits in (c)(2)(ii)(D) and (E) of this section.
- (G) Automatic fuel feed cutoff system—
 (1) General. You must operate the boiler with a functioning system that immediately and automatically cuts off the emission-comparable fuel feed, except as provided by paragraph (c)(2)(ii)(G)(6) of this section:
- (i) When the hourly rolling average carbon monoxide level exceeds 100 ppmv or the combustion gas temperature at the inlet to the initial dry particulate matter control device (and the primary fuel is not coal) exceeds 400 °F on an hourly rolling average.
- (ii) When the emission-comparable fuel feedrate limit for a constituent exceeds the limit provided by Table 2 to this section.
- (iii) When the primary fuel firing rate is below 50 percent on a heat input and mass input basis;
- (iv) When the steam production rate (or other indicator of boiler load) indicates that the boiler load is below 40 percent:
- (v) When the span value of the combustion gas temperature detector is exceeded:
- (vi) Upon malfunction of the carbon monoxide CEMS, the gas temperature detector, the feedrate monitor(s) for the primary fuel, the feedrate monitor(s) used to comply with the maximum feedrate limits for emission-comparable fuel constituents, or the monitor for boiler load; or
- (iv) When any component of the automatic fuel feed cutoff system fails.
- (2) Failure of the automatic fuel feed cutoff system. If the automatic emission-comparable fuel feed cutoff sys-

tem fails to automatically and immediately cut off the flow of emission-comparable fuel (except as provided by paragraph (c)(2)(ii)(G)(6) of this section) upon an occurrence of an event linked to the cutoff system as required under paragraph (c)(2)(ii)(G)(I) of this section, you have failed to comply with the emission-comparable fuel cutoff conditions of this section. If an equipment failure prevents immediate and automatic cutoff of the emission-comparable fuel feed, however, you must cease feeding emission-comparable fuel as quickly as possible.

- (3) Exceedance of a limit. If, notwith-standing an automatic emission-comparable fuel feed cutoff, a limit linked to the cutoff system under paragraphs (c)(2)(ii)(G)(1)(i) through (iv) of this section is exceeded while emission-comparable fuel remains in the combustion chamber, you have failed to comply with a condition of the exclusion.
- (4) Exceedance reporting. For each exceedance of a limit linked to the cutoff system under paragraphs (c)(2)(ii)(G)(I)(i) through (iv) of this section while emission-comparable fuel remains in the combustion chamber (i.e., when the emission-comparable fuel residence time has not transpired since the emission-comparable fuel feed was cutoff), you must submit to the RCRA regulatory authority a written report within 5 calendar days of the exceedance documentins:
 - (i) The exceedance;
- (ii) The measures you have taken to manage the material as a hazardous waste: and
- (iii) The measures you have taken to notify the generator that you have failed to comply with a condition of the exclusion.
- (5) Testing. The automatic emission-comparable fuel feed cutoff system and associated alarms must be tested at least weekly to verify operability, unless you document in the operating record that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, you must conduct operability testing at least monthly. You must document and record in the operating record automatic emission-comparable fuel feed

cutoff system operability test procedures and results.

- (6) Ramping down emission-comparable fuel feed. You may ramp down the emission-comparable fuel feedrate over a period not to exceed one minute. If you elect to ramp down the emissioncomparable fuel feed, you must document ramp down procedures in the operating record. The procedures must specify that the ramp down begins immediately upon initiation of automatic emission-comparable fuel feed cutoff and the procedures must prescribe a bona fide ramping down. If a limit linked to the cutoff system under paragraphs (c)(2)(ii)(G)(1)(i) through (iv) of this section is exceeded during the ramp down, you have failed to comply with that limit.
- (H) Boiler load. (1) Boiler load shall not be less than 40 percent. Boiler load is the ratio at any time of the total heat input to the maximum design heat input.
- (2) Steam production rate or other measure of boiler load shall be monitored continuously and the minimum 40 percent load shall be maintained on an hourly rolling average basis.
- (I) Fuel atomization. The emission-comparable fuel shall be fired directly into the primary fuel flame zone of the combustion chamber with an air or steam atomization firing system, mechanical atomization system, or a rotary cup atomization system under the following conditions:
- (1) Particle size. The emission-comparable fuel must pass through a 200 mesh (74 micron) screen, or equivalent;
- (2) Mechanical atomization systems. Fuel pressure within a mechanical atomization system and fuel flow rate shall be maintained within the design range taking into account the viscosity and volatility of the fuel;
- (3) Rotary cup atomization systems. Fuel flow rate through a rotary cup atomization system must be maintained within the design range taking into account the viscosity and volatility of the fuel.
- (J) Definition of continuous monitoring systems. (1) Continuous monitoring systems (CMS) must sample the controlled parameter without interruption, and evaluate the detector response at least once each 15 seconds,

- and compute and record the average values at least every 60 seconds.
- (2) For CMS other than the CO CEMS, you must install, operate, and calibrate the other CMS according to the manufacturer's written specifications or recommendations, at a minimum.
- (iii) Boiler operator training. (A) Boiler operators are personnel that operate or maintain the boiler when emission-comparable fuel is burned, including continuous monitoring systems and the emission-comparable fuel automatic feed cutoff system.
- (B) Boiler operators must successfully complete a program that teaches them to perform their duties in a way that ensures the boiler's compliance with the operating conditions under paragraph (c)(2)(ii) of this section. The boiler owner or operator must ensure that this program includes all the elements described in the document required under paragraph (c)(2)(iii)(F) of this section.
- (C) This program must be directed by a person trained in boiler operation procedures, and must include instruction which teaches boiler operators procedures relevant to the positions in which they are employed.
- (D) At a minimum, the training program must be designed to ensure that boiler operators understand the operating conditions under paragraph (c)(2)(ii) of this section and are able to respond effectively when the emission-comparable fuel automatic feed cutoff system engages an automatic cutoff of the feed of emission-comparable fuel.
- (E) Boiler operators must take part in an annual review of the initial training required in paragraph (c)(2)(iii)(B) of this section.
- (F) The boiler owner or operator must maintain the following documents and records at the facility:
- (1) The job title for each boiler operator position, and the name of the employee filling each job;
- (2) A written job description for each position listed under paragraph (c)(2)(iii)(F)(I) of this section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill,

education, or other qualifications, and duties of employees assigned to each position;

- (3) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under paragraph (c)(2)(iii)(F)(1) of this section; and
- (4) Records that document that the training or job experience required under paragraphs (c)(2)(iii)(B), (C), (D), and (E) of this section has been given to, and completed by, boiler operators.
- (5) Training records on current personnel must be kept until emission-comparable fuel is no longer burned in the boiler. Training records on former boiler operators must be kept for at least three years from the date the employee last worked as a boiler operator at the facility. Personnel training records may accompany personnel transferred within the same company.
- (3) Off-site shipments. (i) Emission-comparable fuel may not be managed by any entity other than its generator, transporter, and designated burner.
- (ii) Emission-comparable fuel may not be exported to a foreign country.
- (4) EPA Identification Number. A burner that receives emission-comparable fuel from an offsite generator must have or obtain an EPA identification number from the Administrator. A burner who has not received an EPA identification number may obtain one by applying to the Administrator using EPA form 8700–12. Upon receiving the request, the Administrator will assign an EPA identification number to the burner.
- (5) Notification, reporting, and recordkeeping. Except as provided by paragraph (c)(5)(iv) of this section, burners of emission-comparable fuel are subject to the following conditions:
- (i) Initial Notification. (A) Off-site burners. A burner that receives emission-comparable fuel from an offsite generator must submit an initial notification to the Regional or State RCRA and CAA Directors prior to receiving the first shipment:
- (1) Providing the name, address, and EPA identification number of the burner;
- (2) Certifying that the excluded fuel will be stored under the conditions of

paragraphs (c)(1) or (e) of this section and burned in a boiler or hazardous waste combustor under the conditions of paragraph (c)(2) of this section, and that the burner will comply with the notification, reporting, and record-keeping conditions of paragraph (c)(5) of this section;

- (3) Identifying the specific units that will burn the excluded fuel:
- (4) Providing an estimate of the maximum annual quantity of emission-comparable fuel that will be burned, and an estimate of the maximum asfired concentrations of each constituent in Table 2 to this section for which the emission-comparable fuel exceeds the specifications for comparable fuel in Table 1 to this section;
- (5) Providing documentation that ECF will be fired into the flame zone of the primary fuel; and
- (6) Certifying that the state in which the burner is located is authorized to exclude wastes as excluded fuel under the provisions of this section.
- (B) On-site burners. An on-site burner must include in the one-time generator notification required under paragraphs (b)(2)(i)(A) and (B) of this section the information identified under paragraphs (c)(5)(i)(A)(3) through (5) of this section.
- (C) If there is a substantive change in the information provided in the initial notification, the burner must submit a revised notification.
- (ii) Reporting. The burner must submit to the RCRA regulatory authority reports of exceedances of operating parameter limits that are linked to the emission-comparable fuel automatic feed cutoff system, as required under paragraph (c)(2)(ii)(G)(4) of this section.
- (iii) Recordkeeping. (A) Records of shipments. If the burner receives a shipment of emission-comparable fuel from an offsite generator, the burner must retain for each shipment the following information on-site in the operating record:
- (1) The name, address, and RCRA ID number of the generator shipping the excluded fuel;
- (2) The quantity of excluded fuel delivered:
- (3) For ECF that would have otherwise been a hazardous waste listed in

§§ 261.31 through 261.33, the hazardous waste code for the listed waste; and

- (4) The date of delivery;
- (B) Boiler operating data. The burner must retain records of information required to comply with the operating conditions of paragraph (c)(2) of this section in an operating record.
- (C) Records retention. The burner must retain records at the facility for three years.
- (iv) Burners that are hazardous waste combustors. Hazardous waste combustors that burn emission-comparable fuel under the provisions of paragraph (c)(2)(i)(B) of this section are not subject to the provisions of paragraphs (c)(5)(i) through (iii) of this section, except:
- (A) The provisions of paragraphs (c)(5)(i)(A)(I) and (3), and paragraphs (c)(5)(iii)(A) and (C) apply; and
- (B) The initial notification required under paragraphs (c)(5)(i)(A)(I) and (3) must include a certification that the excluded fuel will be stored under the conditions of paragraphs (c)(1) or (e) of this section.
- (d) Failure to comply with the conditions of the exclusion. (1) General. An excluded fuel loses its exclusion if any person managing the fuel fails to comply with the conditions of the exclusion under this section, and the material must be managed as hazardous waste from the point of generation. In such situations, EPA or an authorized state agency may take enforcement action under RCRA section 3008(a), except as provided in paragraph (d)(2) of this section.
- (2) Emission-comparable fuel burned in an off-site, unaffiliated burner. If the generator that claims the exclusion for emission-comparable fuel that is burned in an off-site, unaffiliated burner documents in the operating record that reasonable efforts have been made under this paragraph to ensure that such burner complies with the conditions of exclusion, the burner rather than the generator will be liable for discarding a hazardous waste upon a finding that such burner has not complied with a condition of exclusion.
- (i) In making these reasonable efforts, the generator must, at a minimum, affirmatively answer the following questions prior to shipping

emission-comparable fuel to the burner:

- (A) Has the burner submitted the notification to the RCRA and CAA Directors required under paragraph (c)(5)(i) of this section, and has the burner published the public notice of burning activities required under paragraph (b)(2)(ii) of this section?
- (B) Does publicly available information indicate that the burner facility has not had any formal enforcement actions taken against the facility in the previous three years for violations of the RCRA hazardous waste regulations and has not been classified as a significant non-complier with RCRA Subtitle C? In answering this question, the emission-comparable fuel generator can rely on the publicly available information from EPA or the state. If the burner facility has had a formal enforcement action taken against it in the previous three years for violations of the RCRA hazardous waste regulations and has been classified as a significant non-complier with RCRA Subtitle C. does the emission-comparable fuel generator have credible evidence that the burner will manage the emission-comparable fuel properly? In answering this question, the emissioncomparable fuel generator can obtain additional information from EPA, the state, or the facility itself that the facility has addressed the violations, taken remedial steps to address the violations and prevent future violations, or that the violations are not relevant to the management of emission-comparable fuel under the conditions of this section.
- (C) Does the burner have the equipment and trained personnel to manage the emission-comparable fuel under the conditions of this section?
- (ii) In making these reasonable efforts, the generator may use any credible evidence available, including information obtained from the burner and information obtained from a third party;
- (iii) The generator must maintain for a minimum of three years documentation and certification that reasonable efforts were made for each burner facility to which emission-comparable fuel is shipped.

- (A) Documentation and certification must be made available upon request by a regulatory authority within 72 hours, or within a longer period of time as specified by the regulatory authority.
 - (B) The certification statement must:
- (1) Be signed and dated by an authorized representative of the generator company; and
- (2) Incorporate the following language: "I hereby certify in good faith and to the best of my knowledge that, prior to arranging for transport of emission-comparable fuel to [insert name(s) of burner facility], reasonable efforts were made to ensure that the emission-comparable fuel would be stored and burned under the conditions prescribed by §261.38, and that such efforts were based on current and accurate information."
- (iv) Reasonable efforts must be repeated at a minimum of every three years.
- (v) An unaffiliated burner is a boiler or hazardous waste combustor located at a facility that is not owned by the same parent company that generated the emission-comparable fuel.
- (e) Alternative storage conditions for emissions-comparable fuel. Emissioncomparable fuel may be stored in a tank or container under the following conditions adopted from 40 CFR Part 264 in lieu of the conditions specified under paragraphs (c)(1)(iii) through (c)(1)(viii) of this section. When satisfying these conditions, you must substitute the term "emission-comparable fuel" for each occurrence of the term "hazardous waste" or "waste." You must document in the operating record whether you are complying with the alternative storage conditions of this paragraph, or the storage conditions under paragraphs (c)(1)(iii) through (c)(1)(viii) of this section.
- (1) Security. You must comply with the requirements under §264.14 of this chapter to provide security for your emission-comparable fuel storage facility.
- (2) General inspection requirements. You must comply with the general inspection requirements under §264.15 of this chapter for your emission-comparable fuel storage facility.

- (3) Personnel training. You must comply with the personnel training requirements under §264.16 of this chapter for emission-comparable fuel storage facility personnel.
- (4) General requirements for ignitable, reactive, or incompatible materials. You must comply with the requirements for ignitable, reactive, or incompatible materials managed by the emission-comparable fuel storage facility.
- (5) Preparedness and prevention. You must comply with the preparedness and prevention requirements under §§ 264.31 through 264.37 of this chapter with respect to your emission-comparable fuel storage facility.
- (6) Contingency plan and emergency procedures. You must comply with the contingency plan and emergency procedure requirements under §\$264.51 through 264.56 of this chapter with respect to your emission-comparable fuel storage facility.
- (7) Air emission requirements for equipment leaks. You must comply with the requirements under §§ 264.1051 through 264.1065 of this chapter to control leaks from equipment used to manage emission-comparable fuel;
- (8) Use and management of containers. If you store emission-comparable fuel in a container, you must comply with the following requirements for use and management of those containers:
- (i) Condition of containers. You must comply with the requirements to ensure containers are in good condition under § 264.171 of this chapter;
- (ii) Compatibility of emission-comparable fuel with containers. You must comply with the requirements to ensure compatibility of emission-comparable fuel with containers under § 264.172 of this chapter;
- (iii) Management of containers. You must manage containers as prescribed by §264.173 of this chapter;
- (iv) *Inspections*. You must inspect containers and the containment system as prescribed by §264.174 of this chapter:
- (v) *Containment*. You must comply with the containment provisions under § 264.175 of this chapter;
- (vi) Special requirements for ignitable or reactive emission-comparable fuel. You

Environmental Protection Agency

must comply with the provisions for ignitable or reactive emission-comparable fuel under § 264.176 of this chapter; and

- (vii) Air emission standards. You must comply with the air emission requirements under §§ 264.1081, 264.1086(b)(1), (c), (d), and (f) through (h), 264.1088, and 264.1089 of this chapter.
- (viii) Closed vent systems and control devices. If you use a closed vent system or control device to comply with paragraph (e)(8)(vii) of this section, you must comply with the requirements under §§ 264.1033(b) through (o), and 264.1034 through 264.1036 of this chapter.
- (9) *Tank systems*. If you store emission-comparable fuel in a tank, you must comply with the following requirements:
- (i) Containment and detection of releases. You must comply with the requirements for containment and detection of releases under §264.193(b), (c), (d), (e), and (f) of this chapter;
- (ii) General operating requirements. You must comply with the general operating requirements under §264.194 of this chapter;
- (iii) *Inspections*. You must comply with the inspection requirements under § 264.195 of this chapter;
- (iv) Response to leaks or spills and disposition of leaking or unfit-for-use tank systems. You must comply with the requirements regarding response to leaks or spills and disposition of leaking or unfit-for-use tank systems under \$264.196 of this chapter, except that \$264.196(e)(1) reads for emission-com-

- parable fuel tank systems: "Unless the owner/operator satisfies the requirements of paragraphs (e)(2) through (4) of this section, the tank system must be closed".
- (v) Special requirements for ignitable or reactive materials. You must comply with the requirements for ignitable and reactive materials under §264.198 of this chapter;
- (vi) Special requirements for incompatible materials. You must comply with the requirements for incompatible materials under §264.199 of this chapter; and
- (vii) Air emissions. (A) You must comply with the requirements to control air emissions under §§ 264.1081, 264.1083(c), 264.1084(b) through (1), 264.1087 through 264.1089, and 264.1090(b) through (d) of this chapter.
- (B) Closed vent systems and control devices. If you use a closed vent system or control device to comply with paragraph (e)(9)(vii) of this section, you must comply with the requirements under §§ 264.1033(b) through (o), and 264.1034 through 264.1036 of this chapter.
- (f) Notification of closure of an emission-comparable fuel tank or a container storage unit. If you store emission-comparable fuel in a tank or container, you must submit a notification to the RCRA regulatory authority when a container storage area or a tank system goes out of emission-comparable fuel service which states the date when the tank or container storage area goes out of service.

Table 1 to § 261.38-Detection and Detection Limit Values for Comparable Fuel Specification

Chemical name	CAS No.	Concentration Limit (mg/kg at 10,000 Btu/lb)	Minimum Required Detection Limit (mg/kg)
Total Nitrogen as N	NA	4900	
Total Halogens as Cl	NA.	540	
Total Organic Halogens as Cl	NA.	(^a)	
Polychlorinated biphenyls, total [Aroclors, total]	1336-36-3	ND	1.4
Cyanide, total	57-12-5	ND	1
Metals:			
Antimony, total	7440-36-0	12	
Arsenic, total	7440-38-2	0.23	
Barium, total	7440-39-3	23	
Beryllium, total	7440-41-7	1.2	
Cadmium, total	7440-43-9	1.2	
Chromium, total	7440-47-3	2.3	
Cobalt	7440-48-4	4.6	
Lead, total	7439-92-1	31	
Manganese	7439-96-5	1.2	
Mercury, total	7439-97-6	0.25	
Nickel, total	7440-02-0	58	
Selenium, total	7782-49-2	0.23	
Silver, total	7440-22-4	2.3	
Thallium, total	7440-28-0	23	
Hydrocarbons:			
Benzo[a]anthracene	56-55-3	2400	
Benzene	71-43-2	4100	
Benzo[b]fluoranthene	205-99-2	2400	,
Benzo[k]fluoranthene	207-08-9	2400	
Benzo[a]pyrene	50-32-8	2400	
Chrysene	218-01-9	2400	
Dibenzo[a,h]anthracene	52-70-3	2400	
7,12-Dimethylbenz[a]anthracene	57-97-6	2400	
Fluoranthene	206-44-0	2400	
Indeno(1,2,3-cd)pyrene	193-39-5	2400	
3-Methylcholanthrene	56-49-5	2400	
Naphthalene	91-20-3	3200	
Toluene	108-88-3	36000	
Oxygenates:	100 00 0		
Acetophenone	98-86-1	2400	
Acrolein	107-02-8	39	,
Allyl alcohol	107-02-6	39	
Bis(2-ethylhexyl)phthalate [Di-2-ethylhexyl phthalate]	117-81-7	2400	
Butyl benzyl phthalate	85-68-7	2400	
o-Cresol [2-Methyl phenol]	95-48-7	2400	
m-Cresol [3-Methyl phenol]	108-39-4	2400	
p-Cresol [4-Methyl phenol]	106-39-4	2400	
Di-n-butyl phthalate	84-74-2	2400	

Diethyl phthalate..... 84-66-2 2400 2,4-Dimethylphenol..... 105-67-9 2400 Dimethyl phthalate..... 131-11-3 2400 Di-n-octyl phthalate..... 117-84-0 2400 Endothall..... 145-73-3 100 Ethyl methacrylate..... 97-63-2 39 2-Ethoxyethanol [Ethylene glycol monoethyl ether] 110-80-5 100 ••••• Isobutyl alcohol..... 78-83-1 39 Isosafrole..... 120-58-1 2400 Methyl ethyl ketone [2-Butanone]..... 78-93-3 39 Methyl methacrylate..... 80-62-6 39 1,4-Naphthoquinone..... 130-15-4 2400 Phenol..... 108-95-2 2400 Propargyl alcohol [2-Propyn-1-ol]..... 107-19-7 30 Safrole..... 94-59-7 2400 Sulfonated Organics: Carbon disulfide..... 75-15-0 ND 39 Disulfoton..... 298-04-4 ND 2400 Ethyl methanesulfonate..... 62-50-0 ND 2400 Methyl methanesulfonate..... 66-27-3 ND 2400 Phorate..... 298-02-2 ND 2400 1,3-Propane sultone..... 1120-71-4 ND 100 Tetraethyldithiopyrophosphate [Sulfotepp]..... 3689-24-5 ND 2400 Thiophenol [Benzenethiol]..... 108-98-5 ND 30 O,O,O-Triethyl phosphorothioate..... 126-68-1 ND 2400 Nitrogenated Organics: Acetonitrile [Methyl cyanide]..... 75-05-8 ND 39 2-Acetylaminofluorene [2-AAF]..... 53-96-3 ND 2400 Acrylonitrile..... 107-13-1 ND 39 4-Aminobiphenyl..... 92-67-1 ND 2400 4-Aminopyridine..... 504-24-5 ND 100 62-53-3 ND 2400 Aniline..... Benzidine..... 92-87-5 ND 2400 224-42-0 ND 2400 Dibenz[a,i]acridine..... O,O-Diethyl O-pyrazinyl phosphorothioate [Thionazin] 297-97-2 ND 2400 60-51-5 ND 2400 p-(Dimethylamino) azobenzene [4-Dime thylaminoazobenzene] 60-11-7 ND 2400 3,3[prime]-Dimethylbenzidine..... ND 119-93-7 2400 $\alpha, \alpha\text{-Dimethylphenethylamine}......$ 122-09-8 ND 2400 ND 3.3[prime]-Dimethoxybenzidine..... 119-90-4 100 1,3-Dinitrobenzene [m-Dinitrobenzene]....... 99-65-0 ND 2400 4,6-Dinitro-o-cresol..... ND 2400 534-52-1 2,4-Dinitrophenol..... 51-28-5 ND 2400 2,4-Dinitrotoluene..... 121-14-2 ND 2400 2,6-Dinitrotoluene..... 606-20-2 ND 2400 Dinoseb [2-sec-Butyl-4,6-dinitrophenol]...... 88-85-7 ND 2400 Diphenylamine..... 122-39-4 ND 2400 Ethyl carbamate [Urethane]..... 51-79-6 ND 100 ND Ethylenethiourea (2-Imidazolidinethione)...... 96-45-7 110

§ 261.38

Environmental Protection Agency

40 CFR Ch. I (7-1-09 Edition)

Famphur	52-85-7	ND	2400
Methacrylonitrile	126-98-7	ND	39
Methapyrilene	91-80-5	ND	2400
Methomyl	16752-77-5	ND	57
2-Methyllactonitrile, [Acetone cyanohydrin]	75-86-5	ND	100
Methyl parathion	298-00-0	ND	2400
MNNG (N-Metyl-N-nitroso-N[prime]-nitroguanidine)	70-25-7	ND	110
1-Naphthylamine, [α-Naphthylamine]	134-32-7	ND	2400
2-Naphthylamine, [β-Naphthylamine]	91-59-8	ND	2400
Nicotine	54-11-5	ND	100
4-Nitroaniline, [p-Nitroaniline]	100-01-6	ND	2400
Nitrobenzene	98-96-3	ND	2400
p-Nitrophenol, [p-Nitrophenol]	100-02-7	ND	2400
5-Nitro-o-toluidine	99-55-8	ND	2400
N-Nitrosodi-n-butylamine	924-16-3	ND	2400
N-Nitrosodiethylamine	55-18-5	ND	2400
N-Nitrosodiphenylamine, [Diphenylnitrosamine]	86-30-6	ND	2400
N-Nitroso-N-methylethylamine	10595-95-6	ND	2400
N-Nitrosomorpholine	59-89-2	ND	2400
N-Nitrosopiperidine	100-75-4	ND	2400
N-Nitrosopyrrolidine	930-55-2	ND	2400
2-Nitropropane	79-46-9	ND	2400
Parathion	56-38-2	ND	2400
Phenacetin	62-44-2	ND	2400
1,4-Phenylene diamine, [p-Phenylenediamine]	106-50-3	ND	2400
N-Phenylthiourea	103-85-5	ND	57
2-Picoline [alpha-Picoline]	109-06-8	ND	2400
Propylthioracil, [6-Propyl-2-thiouracil]	51-52-5	ND	100
Pyridine	110-86-1	ND	2400
Strychnine	57-24-9	ND	100
Thioacetamide	62-55-5	ND	57
Thiofanox	39196-18-4	ND	100
Thiourea	62-56-6	ND	57
Toluene-2,4-diamine [2,4-Diaminotoluene]	95-80-7	ND	57
Toluene-2,6-diamine [2,6-Diaminotoluene]	823-40-5	ND	57
o-Toluidine	95-53-4	ND	2400
p-Toluidine	106-49-0	ND	100
1,3,5-Trinitrobenzene, [sym-Trinitobenzene]	99-35-4	ND	2400
alogenated Organics:			
Allyl chloride	107-05-1	ND	39
Aramite	140-57-8	ND	2400
Benzal chloride [Dichloromethyl benzene]	98-87-3	ND	100
Benzyl chloride	100-44-77	ND	100
bis(2-Chloroethyl)ether [Dichoroethyl ether]	111-44-4	ND	2400
Bromoform [Tribromomethane]	75-25-2	ND	39
Bromomethane [Methyl bromide]	74-83-9	ND	39
4-Bromophenyl phenyl ether [p-Bromo diphenyl ether]	101-55-3	ND	2400
Carbon tetrachloride	56-23-5	ND	39
Chlordane	57-74-9	ND	14

Environmental Protection Agency			§ 261.38
p-Chloroaniline	106-47-8	NDI	2400
Chlorobenzene	108-90-7	ND	39
Chlorobenzilate	510-15-6	ND	2400
p-Chloro-m-cresol	59-50-7	ND	2400
2-Chloroethyl vinyl ether	110-75-8	ND	39
Chloroform	67-66-3	ND	39
Chloromethane [Methyl chloride]	74-87-3	ND	39
2-Chloronaphthalene [beta-Chloronaphthalene]	91-58-7	ND	2400
2-Chlorophenol [o-Chlorophenol]	95-57-8	ND	2400
Chloroprene [2-Chloro-1,3-butadiene]	1126-99-8	ND	39
2,4-D [2,4-Dichlorophenoxyacetic acid]	94-75-7	ND	7
Diallate	2303-16-4	ND	3400
1,2-Dibromo-3-chloropropane	96-12-8	ND	39
1,2-Dichlorobenzene [o-Dichlorobenzene]	95-50-1	ND	2400
1,3-Dichlorobenzene [m-Dichlorobenzene]	541-73-1	ND	2400
1,4-Dichlorobenzene [p-Dichlorobenzene]	106-46-7	ND	2400
3,3[prime]-Dichlorobenzidine	91-94-1	ND	2400
Dichlorodifluoromethane [CFC-12]	75-71-8	ND	39
1,2-Dichloroethane [Ethylene dichloride]	107-06-2	ND	39
1,1-Dichloroethylene [Vinylidene chloride]	75-35-4	ND	39
Dichloromethoxy ethane [Bis(2-chloroethoxy)methane]	111-91-1	ND	2400
2,4-Dichlorophenol	120-83-2	ND	2400
2,6-Dichlorophenol	87-65-0	ND	2400
1,2-Dichloropropane [Propylene dichloride]	78-87-5	ND	39
cis-1,3-Dichloropropylene	10061-01-5	ND	39
trans-1,3-Dichloropropylene	10061-01-6	ND	39
1,3-Dichloro-2-propanol	96-23-1	ND	30
Endosulfan I	959-98-8	ND	1.4
Endosulfan II	33213-65-9	ND	1.4
Endrin	72-20-8	ND	1.4
Endrin aldehyde	7421-93-4	ND	1.4
Endrin Ketone	53494-70-5	ND	1.4
Epichlorohydrin [1-Chloro-2,3-epoxy propane]	106-89-8	ND	30
Ethylidene dichloride [1,1-Dichloroethane]	75-34-3	ND	39
2-Fluoroacetamide	640-19-7	ND	100
	76-44-8	ND	1.4
Heptachlor Heptachlor epoxide	1024-57-3	ND	2.8
Hexachlorobenzene	118-74-1	ND	2400
	87-68-3	ND	2400
Hexachloro-1,3-butadiene [Hexachlorobutadiene].	77-47-4	ND	2400
Hexachlorocyclopentadiene			2400
Hexachloroethane	67-72-1	ND	59000
Hexachlorophene	70-30-4	ND	2400
Hexachloropropene [Hexachloropropylene]	1888-71-7	ND	
Isodrin	465-73-6	ND	2400
Kepone [Chlordecone]	143-50-0	ND	4700 1.4
Lindane [gamma-BHC] [gamma-Hexachlorocyclohexane]	58-89-9	ND	
Methylene chloride [Dichloromethane]	75-09-2	ND	39 100
4,4[prime]-Methylene-bis(2-chloroaniline)	101-14-4	ND	
Methyl iodide [lodomethane]	74-88-4	ND	39

40 CFR Ch. I (7-1-09 Edition)

§ 261.38

Pentachlorobenzene	608-93-5	ND	2400
Pentachloroethane	76-01-7	ND	39
Pentachloronitrobenzene [PCNB] [Quintobenzene] [Quintozene].	82-68-8	ND	2400
Pentachlorophenol	87-88-5	ND	2400
Pronamide	23950-58-5	ND	2400
Silvex [2,4,5-Trichlorophenoxypropionic acid]	93-72-1	ND	7
2,3,7,8-Tetrachlorodibenzo-p-dioxin [2,3,7,8-TCDD]	1746-01-6	ND	30
1,2,4,5-Tetrachlorobenzene	95-94-3	ND	2400
1,1,2,2-Tetrachloroethane	79-35-4	ND	39
Tetrachloroethylene [Perchloroethylene]	127-18-4	ND	39
2,3,4,6-Tetrachlorophenol	58-90-2	ND	2400
1,2,4-Trichlorobenzene	120-82-1	ND	2400
1,1,1-Trichloroethane [Methyl chloroform]	71-56-6	ND	39
1,1,2-Trichloroethane [Vinyl trichloride]	79-00-5	ND	39
Trichloroethylene	79-01-6	ND	39
Trichlorofluoromethane [Trichlormonofluoromethane]	75-69-4	ND	39
2,4,5-Trichlorophenol	95-95-4	ND	2400
2,4,6-Trichlorophenol	88-06-2	ND	2400
1,2,3-Trichloropropane	96-18-4	ND	39
Vinyl Chloride	75-01-4	ND ND	39

Notes:

NA--Not Applicable.

ND--Nondetect.

⁽a) 25 or individual halogenated organics listed below.

Environmental Protection Agency

TABLE 2 TO §261.38.—MAXIMUM ALLOWABLE FEEDRATES FOR EMISSION-COMPARABLE FUEL CONSTITUENTS

Chemical Name	CAS Number	Constituent Gas Flowrate- Normalized Feedrate Limit (ug/dscm) ¹
<u>Hydrocarbons</u>		
Benzene	71-43-2	5.33E+04
Naphthalene	91-20-3	3.20E+05
Toluene	108-88-3	1.20E+06
Benzo[a]anthracene	56-55-3	1.60E+03
Benzo[b]fluoranthene	205-99-2	2.00E+02
Benzo[k]fluoranthene	207-08-9	1.00E+03
Benzo[a]pyrene	50-32-8	5.00E+01
Chrysene	218-01-9	1.80E+03
Dibenzo[a,h]anthracene	52-70-30	4.00E+02
7,12-Dimethylbenz[a]anthracene	57-97-6	2.00E+02
Fluoranthene	206-44-0	6.10E+03
Indeno(1,2,3-cd)pyrene	193-39-5	1.00E+03
3-Methylcholanthrene	56-49-5	2.00E+02
<u>Oxygenates</u>		
Acetophenone	98-86-2	3.60E+05
Acrolein	107-02-8	3.60E+05
Allyl alcohol	107-18-6	3.60E+05
Bis(2-ethylhexyl)phthalate [Di-2ethylhexyl phthalate]	117-81-7	3.60E+05
Butyl benzyl phthalate	85-68-7	3.60E+05
o-Cresol [2-Methyl phenol]	95-48-7	3.60E+05
m-Cresol [3-Methyl phenol]	108-39-4	3.60E+05
p-Cresol [4-Methyl phenol]	106-44-5	3.60E+05
Di-n-butyl phthalate	84-74-2	3.60E+05
Diethyl phthalate	84-66-2	3.60E+05
2,4-Dimethylphenol	105-67-9	3.60E+05
Dimethyl phthalate	131-11-3	3.60E+05
Di-n-octyl phthalate	117-84-0	3.60E+05
Endothall	145-73-3	3.60E+05
Ethyl methacrylate	97-63-2	3.60E+05
2-Ethoxyethanol [Ethylene glycol monoethyl ether]	110-80-5	3.60E+05
Isobutyl alcohol	78-83-1	3.60E+05
Isosafrole	120-58-1	3.60E+05
Methyl ethyl ketone [2-Butanone]	78-93-3	3.60E+05
Methyl methacrylate	80-62-6	1.80E+05
1,4-Naphthoquinone	130-15-4	3.60E+05
Phenol	108-95-2	3.60E+04
Propargyl alcohol [2-Propyne-1-ol]	107-19-7	3.60E+05

¹ To determine the maximum allowable mass feedrate per unit time to the combustor, "ug/min," of an emission-comparable fuel constituent, multiply the gas flowrate-normalized feedrate limit, "ug/dscm," times the gas flowrate of the combustor, "dscm/min."

§ 261.38

TABLE 3 TO §261.38—DEFAULT VALUES FOR THE CONCENTRATION OF EMISSION-COMPARABLE FUEL CONSTITUENTS IN FUEL OIL

_			
	Chemical Name	CAS Number	Default Concentration (mg/kg)
	<u>Hydrocarbons</u>		
1	Benzene	71-43-2	75
2	Naphthalene	91-20-3	3500
3	Toluene	108-88-3	380
	Benzo[a]anthracene	56-55-3	2400
5	Benzo[b]fluoranthene	205-99-2	2400
6.	Benzo[k]fluoranthene	207-08-9	2400
7	Benzo[a]pyrene	50-32-8	2400
8	Chrysene	218-01-9	2400
9	Dibenzo[a,h]anthracene	52-70-30	2400
10	7,12-Dimethylbenz[a]anthracene	57-97-6	2400
11	Fluoranthene	206-44-0	2400
12	Indeno(1,2,3-cd)pyrene	193-39-5	2400
13	3-Methylcholanthrene	56-49-5	2400
	Oxygenates		
1	Acetophenone	98-86-2	2400
	Acrolein	107-02-8	39
3	Allyl alcohol	107-18-6	30
	Bis(2-ethylhexyl)phthalate [Di-2ethylhexyl phthalate]	117-81-7	2400
5	Butyl benzyl phthalate	85-68-7	2400
	o-Cresol [2-Methyl phenol]	95-48-7	2400
	m-Cresol [3-Methyl phenol]	108-39-4	2400
8	p-Cresol [4-Methyl phenol]	106-44-5	2400
9	Di-n-butyl phthalate	84-74-2	2400
10	Diethyl phthalate	84-66-2	2400
	2,4-Dimethylphenol	105-67-9	2400
12	Dimethyl phthalate	131-11-3	2400
13	Di-n-octyl phthalate	117-84-0	2400
14	Endothall	145-73-3	100
15	Ethyl methacrylate	97-63-2	39
16	2-Ethoxyethanol [Ethylene glycol monoethyl ether]	110-80-5	100
17	Isobutyl alcohol	78-83-1	39
18	Isosafrole	120-58-1	2400
19	Methyl ethyl ketone [2-Butanone]	78-93-3	39
20	Methyl methacrylate	80-62-6	39
21	1,4-Naphthoquinone	130-15-4	2400
22	Phenol	108-95-2	2400
23	Propargyl alcohol [2-Propyne-1-ol]	107-19-7	30
	Safrole	94-59-7	2400

TABLE 4 TO §261.38.—DEFAULT VALUES FOR THE CONCENTRATION OF

EMISSION-COMPARABLE FUEL CONSTITUENTS IN COAL

· ·	Concentration in Coal
Compound	(mg/kg)
Acetophenone	150
Acrolein	2900
Benzene	217
Bis(2-ethylhexyl)phthalate	730
MEK	3900
Methyl methacrylate	200
Phenol	16
Toluene	120

Note: The default value for other emission-comparable fuel constituents in coal is 0

mg/kg.

 $[73 \; \mathrm{FR} \; 77997, \; \mathrm{Dec.} \; 19, \; 2008]$

§ 261.39 Conditional Exclusion for Used, Broken Cathode Ray Tubes (CRTs) and Processed CRT Glass Undergoing Recycling.

Used, broken CRTs are not solid wastes if they meet the following conditions:

- (a) *Prior to processing*: These materials are not solid wastes if they are destined for recycling and if they meet the following requirements:
- (1) Storage. The broken CRTs must be either:
- (i) Stored in a building with a roof, floor, and walls, or
- (ii) Placed in a container (i.e., a package or a vehicle) that is constructed, filled, and closed to minimize releases to the environment of CRT glass (including fine solid materials).
- (2) Labeling. Each container in which the used, broken CRT is contained must be labeled or marked clearly with one of the following phrases: "Used cathode ray tube(s)-contains leaded glass" or "Leaded glass from televisions or computers." It must also be labeled: "Do not mix with other glass materials."

- (3) Transportation. The used, broken CRTs must be transported in a container meeting the requirements of paragraphs (a)(1)(ii) and (2) of this section.
- (4) Speculative accumulation and use constituting disposal. The used, broken CRTs are subject to the limitations on speculative accumulation as defined in paragraph (c)(8) of this section. If they are used in a manner constituting disposal, they must comply with the applicable requirements of part 266, subpart C instead of the requirements of this section.
- (5) Exports. In addition to the applicable conditions specified in paragraphs (a)(1)–(4) of this section, exporters of used, broken CRTs must comply with the following requirements:
- (i) Notify EPA of an intended export before the CRTs are scheduled to leave the United States. A complete notification should be submitted sixty (60) days before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a twelve (12) month or lesser period. The notification must be in writing, signed by the exporter, and include the following information: